

ABSTRACT OF THE DISCLOSURE

Supplementary control valve devices (26) may be utilized to control the flow of a fluid within an intake passage (16) of a reciprocating piston internal combustion engine and may include a valve member (56) axially reciprocally disposed within the intake passage and at least partially defining a solenoid armature (60). First and second solenoids (38, 50) are provided on opposite sides of the solenoid armature to reciprocally move the valve member between a valve open position and a valve closed position. Sealing contact faces are preferably defined by pole faces (68, 70) of the second solenoid and a peripheral fluid flow passage (34) extends through apertures (46) defined within the second solenoid and between the sealing contact faces. The valve member closes the peripheral fluid flow passage when pressed against the sealing contact faces. Springs (62, 64) preferably bias the valve member towards a central position between the first and second solenoids.